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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/987,707

Applicant(s)

LIPTON ET AL.

Examiner

Tung Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-44 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/15/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/27/2007 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-5, 7-17, 20-22, 24-26, 28-32, 34, and 36-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al. (US 5,802,361).

Re claims 1, 4, 25, 27, and 32, Wang discloses an apparatus for carrying out a method and a computer-readable medium (fig. 1) comprising software (117 of fig. 1) for a video surveillance system (101 of fig. 1), comprising code segments (119 of fig. 1) for operating the video surveillance system based on video primitives (col. 5, lines 10-21), wherein the code segments (119 of fig. 1) for operating the video surveillance system comprise: code segments for identifying one or more user-defined event discriminators (125 of fig. 1; 205 of fig. 2; col. 4, line 67-col. 5, lines 12; col. 8, lines 8, lines 40-47; col. 14, lines 23-42; figures 5a-5i); code segments

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for extracting video primitives from a video (203 of fig. 2a; 121 of fig. 2b; col. 8, lines 20-39; col. 13, line 50-col. 14, lines 17); and code segments for extracting event occurrences (col. 18, lines 24-34; col. 19, lines 49-64; fig. 11) from the extracted video primitives (115 of fig. 2b) using at least one of the one or more user-defined event discriminators (205 of fig. 2a; figs. 5a-5i, and 7), wherein the code segments for extracting event occurrences (123 of fig. 2b) are different from the code segments (121 of fig. 2b) for extracting video primitives; wherein each video primitive is an observable attribute of an object viewed in the video (figures. 5a-5i, 7); wherein the video primitives are at least one of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change (col. 5, lines 10-21); code segments for archiving the extracted video primitives (115 of fig. 2b).

Re claim 5, Wang further discloses code segments for undertaking a response based on extracted event occurrences (fig. 11).

Re claim 7, Wang further discloses code segments for calibrating the video surveillance system (fig. 5c; col. 15, lines 41-52).

Re claims 8 and 33, Wang further discloses wherein the code segments for calibrating comprise code segments for self-calibrating the video surveillance system (in response to selecting an icon (503a of fig. 5a), automatically providing a user interface element for modifying parameters of the image attribute represented by the icon; fig. 5a).

Re claim 9, Wang further discloses wherein the code segments for self-calibrating comprise: code segments for detecting at least one object in a source video (127 of fig. 1; and fig. 10); and code segments for tracking the object (fig. 11, Note identifying an object in an input image).

Re claim 10, Wang further discloses wherein the code segments for detecting at least one object comprise: code segments for detecting at least one object via motion of the object (303 of fig. 3); and code segments for detecting at least one object via change in a background model (303 of fig. 3, Note where each image attribute is listed as image attribute(parameter list). This search inquiry has the semantic meaning, as intended by the user, of "blue sky," and would be employed by the user to identify images having a blue sky background).

Re claim 11, Wang further discloses wherein the code segments for self-calibrating comprise: code segments for identifying trackable areas (121 of fig. 2b; col. 11, line 63-col. 12, lines 9); and code segments for identifying typical sizes of typical objects (human face has size and shape).

Re claim 12, Wang further teaches wherein the code segments for calibrating comprise: code segments for manual calibration; code segments for semi-automatic calibration; and code segments for automatic calibration (fig. 1).

Re claim 13, Wang further discloses code segments for tasking the video surveillance system with the user-defined event discriminators (Note these bookmarks may represent any type of significant information that the user wishes to remember, such as video scenes to be edited later, important events, particular persons, and the like. These bookmarks can be incorporated into a search inquiry to define appropriate images for retrieval).

Re claim 14, Wang further discloses the code segments for tasking comprise code segments for identifying at least one object (col. 23, lines 53-54).

Re claim 15, Wang further discloses wherein the code segments for tasking comprise code segments for identifying at least one spatial area (fig. 5i).

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Re claim 16, Wang further discloses wherein the code segments for tasking comprise code segments for identifying at least one temporal attribute (127 of fig. 1, Note identifying at least one scene in the plurality of images, the scene including at least one image or a set of temporally adjacent images).

Re claim 17, Wang further discloses wherein the code segments for tasking identify at least one interaction (fig. 7, Note the presence of a moving object, human face).

Re claim 20, Wang further discloses wherein the video primitives are retrieved from an archive of video primitives (fig. 12).

Re claim 21, Wang further discloses a computer system comprising the computer-readable medium of claim 1 (fig. 1).

Re claim 22, Wang further discloses a computer-readable medium (fig. 1) comprising software for a video surveillance system, comprising: code segments for identifying one or more user-defined event discriminators (205 of fig. 2a); code segments for accessing archived video primitives from a video (123, 115, and 121 of fig. 2b); and code segments for extracting event occurrences (figures 10 and 11) from accessed archived video primitives using at least one of the one or more user-defined event discriminators (205 of fig. 2a, See also figures 5a-5i).

Re claim 24, Wang further discloses undertaking a response based on extracted event occurrences (fig. 11).

Re claim 26, Wang further discloses a method comprising the steps of: identifying one or more user-defined event discriminators (figs. 5a-5i); accessing archived video primitives extracted from a video (123 and 115 of fig. 2b); and extracting event occurrences (123 of fig. 2b,

and fig. 11) from accessed video primitives using at least one of the one or more user-defined event discriminators.

Re claim 28, Wang further discloses application-specific hardware to emulate a computer and/or software (fig. 1).

Re claims 29 and 34, Wang further discloses wherein event occurrences are extracted based on video primitives and non-video primitives (121 of fig. 1; Note video and still image).

Re claim 30, Wang further discloses code segments for identifying the one or more user-defined event discriminators using a user interface (125 of fig. 1).

Re claims 31 and 36, Wang further discloses wherein at least one user-defined event discriminator defines an interaction between one or more video primitives, between one or more spatial areas of interest, and/or between one or more temporal areas of interest (figs. 5a-5i).

Re claims 37-39, Wang further discloses wherein the video primitives are at least seven of the following: a classification, a size, a shape, a color, a texture, a position, a velocity, a speed, an internal motion, a motion, a salient motion, a feature of a salient motion, a scene change, a feature of a scene change, or a pre-defined model (303 of fig. 1; see figures 5a-5i).

Re claim 40, Wang discloses a computer-readable medium (fig. 1) comprising software for a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives (col. 5, lines 10-21), wherein the code segments for operating the video surveillance system comprise (113, 121, and 115 of fig. 2b): code segments for identifying one or more user-defined event discriminators (125 of fig. 2b, and 205 of fig. 2a; and figs. 5a-5i); code segments for extracting video primitives from a video (121 of fig. 2b); code segments for archiving the extracted video primitives (115 of fig. 2b); and code segments for

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extracting event occurrences from the extracted video primitives using at least one of the one or more user-defined event discriminators (123 of fig. 2b).

Re claim 41, Wang further discloses code segments for identifying one or more additional user-defined event discriminators (figs. 5a-5i); code segments for extracting event occurrences from the archived video primitives using at least one of the one or more additional user-defined event discriminators (figs. 5a and 5i).

Re claim 42, Wang further discloses wherein each video primitive is an observable attribute of an object viewed in the video and includes at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change (303 of fig. 3, figures. 5a-5i).

Re claim 43, Wang further discloses a computer-readable medium comprising software for a video surveillance system (fig. 1), comprising code segments for operating the video surveillance system based on video primitives (col. 5, lines 10-21), wherein the code segments for operating the video surveillance system comprise: code segments for extracting video primitives from a video (121 of fig. 2b); and code segments for archiving the extracted video primitives (115 of fig. 2b).

Re claim 44, Wang further discloses wherein each video primitive is an observable attribute of an object viewed in the video and includes at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change (figs. 5a-5i).

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4. Claims 1, 4-5, 13-14, 20-22, 24-30, 32, 34, and 27-44 are rejected under 35

U.S.C. 102(b) as being anticipated by Hennessey et al. (US 6,014,461).

Re claims 1, 25, 27, 32 Hennessey discloses a computer-readable medium (fig. 1) comprising software for a video surveillance system (col. 1, lines 43-45), comprising code segments (fig. 1) for operating the video surveillance system (col. 1, lines 43-45) based on video primitives (204 of fig. 2), wherein the code segments for operating the video surveillance system comprise: code segments for identifying one or more user-defined event discriminators (25 of fig. 1); code segments for extracting video primitives from a video (203 and 204 of fig. 2); and code segments for extracting event occurrences (205-206 of fig. 2) from the extracted video primitives (204 of fig. 2) using at least one of the one or more user-defined event discriminators (fig. 30, Note OBJECT DETECTION), wherein the code segments for extracting event occurrences (205-206 of fig. 2) are different from the code segments for extracting video primitives (204 of fig. 2); wherein each video primitive is an observable attribute of an object viewed in the video (fig. 20); wherein the video primitives are at least one of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change (fig. 20, Note (1), (2), (3), (4)...(30); Note the computer and memory coupled to the knowledge base and the digital file, the computer operable to retrieve an image from the digital image file, to perform automatic object identification on the image, to generate high level descriptors for the object by determining a plurality of common characteristics including size, shape, average color, edge sharpness, solidity of texture and regularity of texture of the object, wherein the characteristics are represented numerically and to

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numerically compare the high level descriptors of the object with the descriptors stored in the knowledge base by calculating a similarity function).

Re claim 4, Hennessey further discloses code segments for archiving the extracted video primitives (206 of fig. 2).

Re claim 5, Hennessey further discloses code segments for undertaking a response based on extracted event occurrences (207 of fig. 2).

Re claim 13, Hennessey further discloses code segments for tasking the video surveillance system (208 and 209 of fig. 1) with the user-defined event discriminators (25 of fig. 1).

Re claim 14, Hennessey further discloses wherein the code segments for tasking comprise code segments for identifying at least one object (fig. 4).

Re claim 20, Hennessey further discloses wherein the video primitives are retrieved from an archive of video primitives (203 and 204).

Re claim 21, Hennessey further discloses a computer system comprising the computer-readable medium of claim 1 (fig. 2).

Re claim 22, Hennessey further discloses a computer-readable medium comprising software for a video surveillance system (fig. 1), comprising: code segments for identifying one or more user-defined event discriminators (25 of fig. 1; Note Specific vector elements are weighted according to their relevance as discriminators for selection of an object or anomaly class. Validation of the knowledge base continues during use of the system as does knowledge base development, whereby the user can add new knowledge (description vectors) into the knowledge base as necessary); code segments for accessing archived video primitives from a

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video (203 and 204 of fig. 1, Note the computer operable to retrieve an image from the digital image file, to perform automatic object identification on the image); and code segments for extracting event occurrences from accessed archived video primitives using at least one of the one or more user-defined event discriminators (205 and 206 of fig. 2; see figures 30 and 31).

Re claim 24, Hennessey further discloses code segments for undertaking a response based on extracted event occurrences (fig. 20).

Re claim 26, Hennessey further discloses identifying one or more user-defined event discriminators (25 of fig. 1; Note such a small object knowledge-base subset for each device level, process, event or appearance group can be stored with a configuration file for reference, alignment and analysis); accessing (11 and 19 of fig. 1) archived video primitives (204 of fig. 1) extracted from a video (203 of fig. 1); and extracting event occurrences (205-207 of fig. 2) from accessed video primitives using at least one of the one or more user-defined event discriminators (25 of fig. 1).

Re claim 28, Hennessey further discloses application-specific hardware to emulate a computer and/or software (fig. 1).

Re claims 29 and 34, Hennessey further discloses wherein event occurrences are extracted based on video primitives and non-video primitives (figs. 9 and 13a).

Re claim 30, Hennessey further discloses code segments for identifying the one or more user-defined event discriminators using a user interface (25 of fig. 1).

Re claims 37-39, Hennessey further discloses wherein the video primitives are at least seven of the following: a classification, a size, a shape, a color, a texture, a position, a velocity, a

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speed, an internal motion, a motion, a salient motion, a feature of a salient motion, a scene change, a feature of a scene change, or a pre-defined model (fig. 20).

Re claim 40, Hennessey further discloses a computer-readable medium comprising software for a video surveillance system (fig. 1), comprising code segments (fig. 2) for operating the video surveillance system based on video primitives, wherein the code segments for operating the video surveillance system comprise: code segments for identifying one or more user-defined event discriminators (25 of fig. 1); code segments for extracting video primitives from a video (203 and 204 of fig. 2); code segments for archiving the extracted video primitives (204 of fig. 1); and code segments for extracting event occurrences (305-207) from the extracted video primitives using at least one of the one or more user-defined event discriminators (fig. 20).

Re claim 41, Hennessey further discloses code segments for identifying one or more additional user-defined event discriminators (figs. 5a-5i); code segments for extracting event occurrences (205-207 of fig. 2, and figure 20) from the archived video primitives using at least one of the one or more additional user-defined event discriminators.

Re claim 42, Hennessey further discloses wherein each video primitive is an observable attribute of an object viewed in the video and includes at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change (fig. 20).

Re claim 43, Hennessey further discloses a computer-readable medium comprising software for a video surveillance system (fig. 1), comprising code segments for operating the video surveillance system based on video primitives (204 of fig. 1), wherein the code segments for operating the video surveillance system comprise: code segments for extracting video

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primitives from a video (203 and 204 of fig. 2); and code segments for archiving the extracted video primitives (204 of fig. 2).

Re claim 44, Hennessey further discloses wherein each video primitive is an observable attribute of an object viewed in the video and includes at least one of the following: a size; a shape; a color; a texture; a position; a velocity; a speed; an internal motion; a feature of a salient motion; or a feature of a scene change (fig. 20).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-22, and 24-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brill et al. (US 6,816,184) in view of Hennessey (US 6,014,461).

Re claims 1, 22, 25-27, 32, and 37-39, Brill teaches a computer-readable medium comprising software for a video surveillance system (fig. 1), the computer (16 of fig. 1) comprises code segments for automatically operating the video surveillance system based on video primitives (fig. 3, Note video primitives are defined as a person: entrance, deposit, removal, regions, areas, size, shape, and exit in period of time in figure 8), wherein the code segments for operating the video surveillance system comprise: code segments (figs. 6 and 8) for identifying one or more user-defined event discriminators; code segments (fig. 7) for extracting

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video primitives (a person enters the user defined region, and a box is placed in or removed from the user defined region; objects: 106 and 107 of fig. 7, and regions: 86 and 91 of fig. 7; see also fig. 3; classify objects; col. 4, lines 51-63; and col. 5, lines 8-14) from a video; and code segments (fig. 7) for extracting event occurrences (the person enters the user defined region (86 of fig. 7) and the box is placed in or removed from the user defined region (91 of fig. 7)), which are considered as event occurrences from the video primitives (motion analysis of fig. 3) using at least one of the one or more user-defined event discriminators (col. 7, line 50-col. 8, line 34; col. 8, lines 42-67); wherein the code segments for extracting event occurrences (Fig. 3, Note a rest event occurs when a moving object comes to a stop but continues to be present without moving) are different from the code segments for extracting video primitives (sizes 111, 86, 112, 91, 93 of fig. 7); wherein each video primitive is an observable attribute of an object viewed in the video (fig. 7, Note the attribute is a movement of the person (106 of fig. 7) and the size (111 of fig. 7)); wherein the video primitives are at least one of the following: a size, a shape, a color, a texture, a velocity, a speed, an internal motion, a feature of a salient motion, or a feature of a scene change (entrance (51 of fig. 3) and exit (54 of fig. 3), F6 and F8 are considered a scene change).

It noted that Brill does not particularly teaches an observable attribute of an object viewed in the video, and the video primitives are at least seven of the following: a classification, a size, a shape, a color, a texture, a position, a velocity, a speed, an internal motion, a motion, a salient motion, a feature of a salient motion, a scene change, a feature of a scene change, or a pre-defined model as claimed

Hennessey teaches an observable attribute of an object viewed in the video (207 and 208 of fig. 2), and the video primitives are at least seven of the following: a classification, a size, a

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shape, a color, a texture, a position, a velocity, a speed, an internal motion, a motion, a salient motion, a feature of a salient motion, a scene change, a feature of a scene change, or a pre-defined model ((1), (2), (3), (4), (5), (6), ... (30) of fig. 20; cols. 8 and 9)).

Therefore, taking the teachings of Brill and Hennessey as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Hennessey into Brill to reduce system errors and improve classification capability, narrow the scope of the knowledge base to achieve more accurate results, knowledge consolidation, knowledge validation and organization for knowledge base design and its applications.

Re claim 4 and 24, Brill further discloses code segments for archiving the extracted video primitives (101 of fig. 7, Note current video image (101) is displayed on the screen and the extracted video primitives are a person and box (106 and 107 of fig. 7)).

Re claim 5, Brill further discloses code segments for undertaking a response based on extracted event occurrences (106 and 107 of fig. 7; Note col. 7, lines 51- 6).

Re claim 6, Brill further disclose wherein the response comprises initiating another sensor system (some other type of image detector is used for initiating sensor system, col. 9, line 66-col. 10, line 4) .

Re claim 7, Brill further discloses code segments (16 of fig. 1, Note a video surveillance system (fig. 1) is set up, calibrated, tasked, and operated) for calibrating the video surveillance system.

Re claim 8, Brill further discloses wherein the code segments for calibrating comprise code segments for self-calibrating the video surveillance system (16 of fig. 1, Note the computer and the video camera automatically perform operation).

Re claim 9, Brill further discloses wherein the code segments for self-calibrating comprise: code segments for detecting as least one object (person in video source) in a source video (12 of fig. 1; see also figs. 2A-2H); and code segments for tracking the object (fig. 3, Note the computer (16 of fig. 1) then carries out motion analysis, by tracking movement or non-movement of each identified change region through a succession of the frames or images from the video camera).

Re claim 10, Brill further discloses wherein the code segments for detecting at least one object comprise: code segments for detecting at least one object via motion of the object (fig. 3); and code segments for detecting at least one object via change in a background model (fig. 2A-2H).

Re claim 11, Brill further discloses wherein the code segments for self-calibrating comprise: code segments for identifying trackable areas (86, 88, 91, and 93 of fig. 6, Note areas A, B, C, and D); and code segments for identifying typical sizes of typical objects (col. 4, lines 51-63).

Re claim 12, Brill further discloses wherein the code segments for calibrating comprise: code segments for manual calibration; code segments for semi-automatic calibration; and code segments for automatic calibration (16 of fig. 1, Note the computer automatically performs operations, and the user manually enter parameters (event discriminators), so they both considered as semi-automatic calibration (set-up)).

Re claims 13-19. Brill further discloses code segments for tasking the video surveillance system with the user-defined event discriminators (fig. 8); wherein the code segments for tasking comprise code segments for identifying: at least one object (Objects of fig. 8); at least one spatial

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area (Regions of fig. 8; see also figs. 6-7); at least one temporal attribute (Duration, time and day of fig. 8); at least one interaction (Events and Objects of fig. 8); at least one alarm (Actions of fig. 8); wherein the video primitives are from at least one of a video sensor (12 of fig. 1) and another sensor (col. 2, lines 54-55).

Re claim 20, Brill further discloses wherein the video primitives are retrieved from an archive of video primitives (101 of fig. 7, Note current video image is displayed).

Re claim 21, Brill further discloses a computer system comprising the computer-readable medium (16 of fig. 1; Note the computer inherently has computer readable medium) of claim 1.

Re claim 29, Brill further discloses wherein event occurrences are extracted based on video primitives and non-video primitives (101 of fig. 7; col. 2, lines 54-56, Note some other type of image detector are used as considered non-video primitives).

Re claim 30, Brill further discloses code segments for identifying the one or more user-defined event discriminators using a user interface (18 and 19 of fig. 1).

Re claim 31, Brill further discloses wherein at least one user-defined event discriminator defines an interaction between one or more video primitives (106 and 107 of fig. 7; Not a person and a box), between one or more spatial areas of interest (86, and 91 of fig. 7), and/or between one or more temporal areas of interest (Duration of fig. 8; fig. 3).

Re claim 28, Brill further discloses wherein the apparatus comprises application-specific hardware to emulate a computer and/or software (the computer (16 of fig. 1) inherently has hardware and software in order to performing the operation as disclosed).

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Re claim 33, Brill further discloses self-calibrating the application-specific hardware for performing video surveillance (16 of fig. 1, Note the computer has automatic functions to perform the surveillance monitoring the loiter area and events).

Re claim 34, Brill further discloses wherein event occurrences are extracted based on video primitives and non-video primitives (some other type of image detector is used for initiating sensor system, col. 9, line 66-col. 10, line 4).

Re claim 35, Brill further discloses wherein at least one user-defined event discriminator includes at least two of the following: an object, a spatial area, a temporal attribute, an interaction, and an alarm (fig. 8).

Re claim 36, Brill further discloses wherein at least one user-defined event discriminator defines an interaction between one or more video primitives (106 and 107 of fig. 7), between one or more spatial areas of interest (86 and 91 of fig. 7), and/or between one or more temporal areas of interest (Duration of fig. 8).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujioka et al. (US 4,908,704) discloses method and apparatus for obtaining an object image and distance data of a moving object.


Contact Information

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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